

NAR-19-7696



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW6510G07531-6F-1

Job Sheet 199065



Part No: RBW6510G07531-6F-1

Job Qty: 2 pcs

7 pcs. D.E

Part Name: Reaction Block Support



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/12/19

Job Tracking No:

Due Date: 10/21/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6510G07531-6F Rev A IPP Rev. A 19.08.06 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier Lead Time	
100	Waterjet - Omax - 1	2 pcs	10/21/19	10/21/19	0.17	0.40	Waterjet - Omax	02/19/29/07
120	NV5000 - 1 - B4B	2 pcs	10/21/19	10/21/19	1.00	2.00	NV5000 - 1 - B4B	ALA
							NV5000 - 2 - B4B	S.C.L.
130	QC 2	2 pcs	10/21/19	10/21/19	0.00	0.00	QC 2 - 1	
							QC 2 - 12	
							QC 2 - 14	
							QC 2 - 17	
							QC 2 - 19	
							QC 2 - 2	
							QC 2 - 20	
							QC 2 - 22	
							QC 2 - 23	
							QC 2 - 25	
							QC 2 - 32	S.C.L. 19-10-10
							QC 2 - 33	
							QC 2 - 35	
							QC 2 - 39	
							QC 2 - 4	
							QC 2 - 40	
							QC 2 - 44	
							QC 2 - 45	
							QC 2 - 48	
							QC 2 - 49	
							QC 2 - 50	
							QC 2 - 51	
							QC 2 - 52	
							QC 2 - 57	
							QC 2 - 62	
							QC 2 - 63	
							QC 2 - 8	
							QC 2 - 66	

19-10-9

S.C.L. 19-10-10

PTO ->

140	QC 8	2 pcs	10/21/19	0.00 0.00	QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					QC 2 - 73	
					QC 2 - 69	
					QC 8 - 12	
					QC 8 - 14	
					QC 8 - 17	
					QC 8 - 20	
					QC 8 - 25	
					QC 8 - 3	
					QC 8 - 32	
					QC 8 - 33	
					QC 8 - 35	
					QC 8 - 39	
					QC 8 - 4	
					QC 8 - 44	
					QC 8 - 45	
					QC 8 - 49	
					QC 8 - 58	
					QC 8 - 8	B - 19-10-10
					QC 8 - 9	
					QC 8 - 68	
					QC 8 - 67	
					QC 8 - 1 (A)	
					QC 8 - 47	
					QC 8 - 40	
					QC 8 - 52	
					QC 8 - 23	
					QC 8 - 57	
150	Outsource - 13 - Zinc Plating	2 pcs	10/21/19		GRO002-VC	1820A-10-16
160	Packaging 2-1 - Receive - B4B	2 pcs	10/21/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	OP OCT 25 2019
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	

DAS
03
9-89

				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
170 QC 6	2 pcs	10/21/19	0.00 0.00	QC 6 - 9	DAS OCT 25 2019 68
175 SF <u>MLL</u> 176 QC5				QC 6 - 68	9-89
				QC 6 - 61	88-6
				QC 6 - 40	OCT 31 2019 07
				QC 6 - 81	svd
180 Packaging 3-1 - Stock - B4B	2 pcs	10/21/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	DAS 28 9-89
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
190 QC 21 - SA	2 pcs	10/21/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	

Part Op 100 - 1-Cut BLANK 5.93" X 9.06". 2-Debur if necessary
 Descriptions: 120 - 1-Machine as per folio FC 990 FOLIO REV: AA DWG REV: A 2-Debur
 130 - QC2- Inspect parts off machine FAI/FAIB
 140 - QC8- Inspect parts - second check
 150 - Issue P/O: 44775 -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of
 Conformity is required
 160 - Certificate of Conformity is required
 170 - QC6- All purchased or subcontracted products

GA215

NOV 04 2019

8/12/2019

175 FILLW/BLACK PAINT
176 QCS

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

180 - Identify as per dwg & Stock Location: _____

190 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-S-0.500	AISI 4140 Steel Sheet	.7480 sf (.374 ea)	100-Waterjet - Omax - 1	SK05699

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Waterjet - Omax - 1	MT-4140-S-0.500	1	34	0

Part Specifications

Specifications could not be found.

Plex 8/12/19 9:59 AM Dart.lajeunesse.marie

DART AEROSPACE LTD		Work Order:	199065
Description: Reaction Block support		Part Number:	RBWGS10607531-GF-1
Inspection Dwg: RBWGS10607531-GF Rev: A		Page 1 of 1	

INSPECTION SHEET

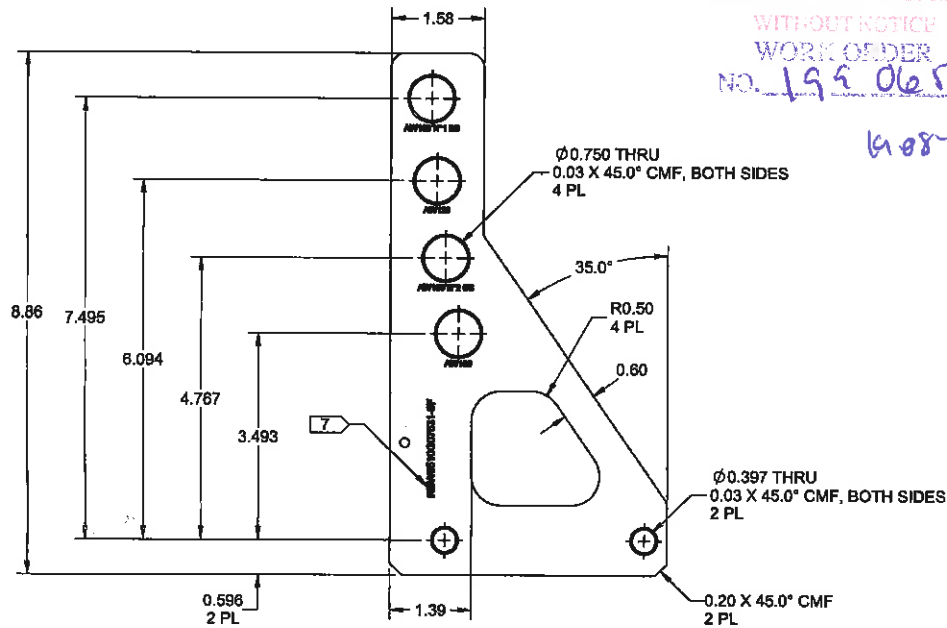
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
8.86	± 0.10	8.864	✓		H-G	3/006
7.495	± 0.005	7.496	✓		"	"
6.094	± 0.005	6.095	✓		"	"
4.767	± 0.005	4.767	✓		"	"
3.493	± 0.005	3.493	✓		H-G	3/006
.596	± 0.005	.596	✓		VERN.	MGP-04
1.39	± 0.010	1.393	✓		VERN.	MGP-04
1.58	± 0.010	1.583	✓		"	"
Ø.750	± 0.005	.748	✓		G-P	—
0.03 x 45°	± 0.010	.030	✓		VERN.	MGP-04
35°	$\pm 1°$	35°	✓		A-G	CNC-17
.60	± 0.010	.603	✓		VERN.	MGP-04
R.50	± 0.010	R.50	✓		GP	—
Ø.397	± 0.005	.398	✓		GP	—
.20 x 45°	± 0.010	.205	✓		VERN.	MGP-04
.396	± 0.005	.395	✓		VERN.	MGP-04
4.73	± 0.010	4.733	✓		"	"
.939	± 0.005	.939	✓		"	"
3.405	± 0.005	3.405	✓		"	"
.25	± 0.010	.25	✓		"	"
2.25	± 0.010	2.25	✓		"	"
Ø.156	± 0.005	.156	✓		GP	—
R.25	± 0.010	R.25	✓		R-G	—
1.19	± 0.010	1.192	✓		VERN.	MGP-04
1.93	± 0.010	1.929	✓		"	"
3.648	± 0.005	3.645	✓		H-G	3/006
3.553	± 0.005	3.550	✓		"	"
3.395	± 0.005	3.392	✓		"	"
3.177	± 0.005	3.174	✓		"	"

Measured by: ALA./scv	Checked by: B.	QC Inspector:
Date: 19-10-9	Date: 19-10-10	Date:

Engineering Approval: (If necessary)	Date:
--	--------------

Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

SHOP COPY
RETURN TO
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 195 065 mws
610872

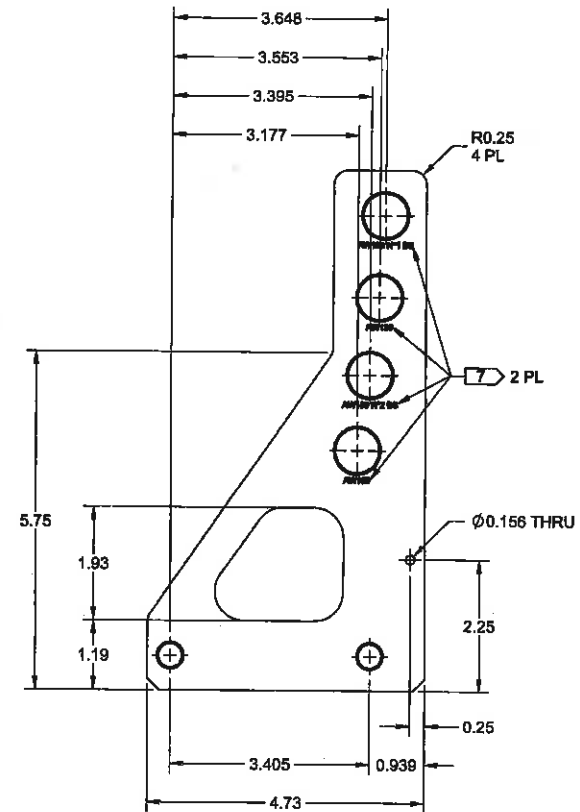


RBW6510G07531-6F-1 REACTION BLOCK SUPPORT

8

NOTES:

- 1) MATERIAL: 4140 (28-32 RC)
- 2) HEAT TREAT: N/A
- 3) FINISH: ZINC PLATE (YELLOW OR BLACK) PER ASTM B633 TYPE 2 CLASS 2
- 4) TOLERANCES: X.X = ± 0.1 " / ± 1 "
X.XX = ± 0.01 " / ± 0.5 "
X.XXX = ± 0.005 " / ± 0.1 "
X.XXXX = ± 0.0005 " / ± 0.05 "
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = ± 0.005 "
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) REMOVE ALL SHARP EDGES AND BURRS
- 7) IDENTIFICATION: MACHINE ENGRAVE AS SHOWN, THEN FILL WITH BLACK PAINT
- 8) DIMENSIONS MUST BE MET AFTER PLATING



DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED

KPT
KPT
VM
FK

DATE 2019-07-04

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

TOOL PART #
RBW6510G07531-6F

TITLE
REACTION BLOCK SUPPORT ASSEMBLY

REV. A
SHEET 2 OF 3

SCALE
NTS

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044775**



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044775
PO Date: 10/15/19
Due Date: 10/23/19
Purchase Order Revision:
Revision Date:
Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground
Pymt Terms: Net 60
Freight Terms:
Special Comments:

E-MAILED
2019-10-21

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	199033	RBW6500G04231-3G-3	RBW6500G04231-3G RevB	Guide -Issue P/O; -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	10/23/19	6 pcs	0 pcs	6 pcs	\$6.98/pcs	\$41.88
2	196882	RB6796941	RB6796941 Rev 11	Seals Replacement, Accessories Gear Box Outside Processing - Zinc Plating -Issue P/O to GROUPE ALTECH: P/O Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 1144 - Certificate of Conformity is required	Cancelled	-	10/23/19	0 pcs	0 pcs	0 pcs	\$0.10/pcs	\$0.00



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **POHB044775**



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	199065	RBW6510G07531-6F-1	RBW6510G07531-6F RevA	Reaction Block Support -Issue P/O; -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; yellow -Material type; 4140 -Certificate of Conformity is required	Firmed	-	10/23/19	7 pcs	0 pcs	7 pcs	\$7.10/pcs	\$49.70
4	199118	RBST4241-1	RBST4241 Rev 1	Roller Fixture -Issue P/O; -Zinc plate, ASTM B633 TYPE 2 SC2 -Color; BLACK -Material type; O1 -Certificate of Conformity is required	Firmed	-	10/23/19	6 pcs	0 pcs	6 pcs	\$25.00/pcs	\$150.00
Grand Total:											\$241.58	

Order Notes

- Procurement Quality Clauses
- A005 right of entry
 - A012 chemical and physical test report
 - A016 personnel qualification
 - A017 raw material identification (as applicable)
 - A022 Apical Processing
 - A024 process certifications
 - A026 certification of material conformance
 - A041 quality management system
 - A042 dart notification by supplier
 - A043 retention of quality documents
 - A048 counterfeit parts avoidance, detection, mitigation and disposition program
 - A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/21/19 10:41 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance

(023284-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

023284 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET

HAWKESBURY, ON, K6A1K7

CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
24-Oct-2019		Jigar Patel		POHB044775				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC NC Qty	Qté Scrap/ Scrap/	À venir/ Back Order
1	RBW6500G04231-3G-3 / RBW6500G04231-3G Rev.B	RBW6500G04231-3G-3 ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours AS PER ASTM B633 TYPE - 2, SC - 2 0.0003"	ZINC CH	6	6	0	0	0
2	RBW6510G07531-6F-1 / RBW6510G07531-6F Rev.A	RBW6510G07531-6F-1 / RBW6510G07531-6F ZINC-YELLOW [ZINC YELLOW] OLD YELLOW CHROMATE, 96 hours AS PER ASTM B633 TYPE - 2, SC - 2 0.0003"	ZINC CH	7	7	0	0	0
3	RBST4241-1 / RBST4241 Rev.1	RBST4241-15 01-ZINC BLACK [ZINC BLACK] AS PER ASTM B633 TYPE - 2, SC - 2 0.0003"	ZINC CH	6	6	0	0	0

RECEIVED
 OCT 24 2019

DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

J. J. J.

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.

Entered:

Date: Nov 5/19



NCR No.

19-7696

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

Job: <u>199065</u> Part No. <u>RBWGS1060731-SF.1</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐				Cross tube ☐ Small Fab ☐ Finishing ☐		Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐		Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐																											
Date: <u>19-10-10</u>		Sequence #: <u>120</u>		QTY Affected: <u>1</u> <u>7</u>				MRB (OSI042) <u>68</u> <u>9-89</u> OCT 10 2019																															
Description Work Order Deviation				Disposition				Completed By <u>S.C.L. 19-10-10</u> Lead hand / Supervisor <u>B.A. 19-10-10</u> QC / QA Coordinator <u>DAS</u> <u>68</u> <u>9-89</u> OCT 10 2019																															
Wrong origin called in folio, the first chamfer is too deep.				Corrected set-up view.																																			
Root Cause Operator ☐ Manufacturing Process ☒ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="0"> <tr> <td>☐ Pressure/Forced</td> <td>☐ Contamination</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Bending</td> <td>☐ Misaligned/off center</td> <td>☐ Folio/Program</td> <td>☐ Outside Tolerance</td> </tr> <tr> <td>☐ Crushing</td> <td>☒ BOM/Route</td> <td>☐ Grain Direction</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Crimp/Kink/Ripple/Wave/Twist</td> <td>☐ Incomplete/Unclear Instructions</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☒ Out of Sequence</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Mislabeled</td> <td>☐ Fit/Function</td> <td>☐ Off-set/Set-up</td> <td></td> </tr> </table>										☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance	☐ Crushing	☒ BOM/Route	☐ Grain Direction	☐ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Marks/Chatter	☐ Drill Holes	☒ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
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☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up																																					
		Other/Details:																																					